

# Computer Desktop Encyclopedia

**amacom**

American Management Association

New York • Atlanta • Boston • Chicago • Kansas City • San Francisco • Washington, D.C.  
Brussels • Mexico City • Tokyo • Toronto

Library of Congress Cataloging-in-Publication Data

Freedman, Alan

Computer desktop encyclopedia / Alan Freedman.

p. cm.

ISBN 0-8144-0012-4 (CD-ROM). — ISBN 0-8144-0010-8 (pbk.)

1. Computers—Dictionaries. I. Title.

QA76.15.F732 1996

004'.03—dc20

96-724  
CIP

© 1996 The Computer Language Company Inc., Point Pleasant, PA 18950.  
All rights reserved.

Printed in the United States of America.

The publication may not be reproduced, stored in a retrieval system, or transmitted in whole or in part, in any form or by any means, electronic, mechanical, photocopying, recording, or otherwise, without the prior written permission of AMACOM, a division of American Management Association, 1601 Broadway, New York, NY 10019.

Printing number

10 9 8 7 6 5 4 3 2 1

iv

**BEST AVAILABLE COPY**

## permanent font

designed to handle a variety of system administrator functions.

### permanent font

- (1) A soft font that is kept in the printer's memory until the printer is turned off.
- (2) Same as *internal font*.

### permanent memory

Same as *non-volatile memory*.

### permutation

One possible combination of items out of a larger set of items. For example, with the set of numbers 1, 2 and 3, there are six possible permutations: 12, 21, 13, 31, 23 and 32.

### perpendicular recording

See *vertical recording*.

### per seat

Per workstation. Software licensed on a per seat basis is priced according to the number of personal computers or workstations that it will be used in.

### persistence

- (1) In a CRT, the time a phosphor dot remains illuminated after being energized. Long-persistence phosphors reduce flicker, but generate ghost-like images that linger on screen for a fraction of a second.
- (2) In object technology, an object that exists after the program that created it. See *persistent object*.

### persistent data

Data that exists from session to session. Persistent data is stored in a database on disk or tape. Contrast with *transient data*.

### persistent link

See *hot link*.

### persistent object

An object that continues to exist after the program that created it has been unloaded. An object's class and current state must be saved for use in subsequent sessions.

### personal communicator

See *PDA*.

### personal computer

Synonymous with microcomputer, a computer that serves one user. It is used at home and in the office for almost all applications traditionally performed on larger computers.

With the addition of a modem, it becomes a terminal, capable of retrieving information from other computers and online services worldwide.

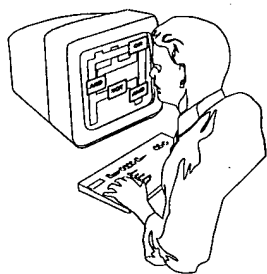
There are a variety of personal computers on the market, priced from \$300 to over \$10,000. Size is based on its memory and disk capacity. Speed is based on the CPU that runs it, and output quality is based on the resolution of its display screen and printer.

### Major suppliers of personal computers

The personal computer world is overwhelmingly dominated by IBM PCs and IBM-compatible PCs. There are hundreds of vendors and thousands of models, although all models fall into a handful of categories (see *PC*).

The history of personal computers

AVAILABLE COPY



Per Seat

**legacy system**

A mainframe or minicomputer information system that has been in existence for a long time.

**Lempel Ziv**

A data compression algorithm that uses an adaptive compression technique. See *LZW*.

**LEN**

(Low Entry Networking) In SNA, peer-to-peer connectivity between adjacent Type 2.1 nodes, such as PCs, workstations and minicomputers. LU 6.2 sessions are supported across LEN connections.

**LEO**

(Low-Earth Orbit) A type of communications satellite that orbits no higher than 500 miles above the earth. It differs from the geosynchronous, or GEO, satellite, which is 22,282 miles high. The GEO appears stationary, because it rotates at earth speed. The LEO rotates around the globe in a couple of hours, but its shorter distance supports low-power, hand-held transmitters.

**letter quality**

The print quality of an electric typewriter. Laser printers, ink jet printers and daisy wheel printers provide letter quality printing. 24-pin dot matrix printers provide near letter quality (NLQ), but the characters are not as dark and crisp.

**level 1 cache, level 2 cache**

See *cache*.

**lexicographic sort**

Arranging items in alphabetic order like a dictionary. Numbers are located by their alphabetic spelling.

**Lexmark**

(Lexmark International, Inc., Lexington, KY) A manufacturer of desktop printers. Lexmark was a division of IBM that was spun off into an independent company in 1991. IBM retained minor ownership and continues to make large line printers used in datacenters. Lexmark makes IBM's dot matrix printers, keyboards, typewriters and related supplies.

Lexmark makes its own printer engines and was the first to bring a 600 dpi laser printer to market as well as a true 1,200 dpi printer. Lexmark laser printers thus far offer quality at lower prices.

**LF**

See *line feed*.

**LHARC**

A popular freeware compression program developed by Haruyasu Yoshizaki that uses a variant of the LZW (LZ77) dictionary method followed by a Huffman coding stage. It runs on PCs, UNIX and other platforms as its source code is also free.

**librarian**

- (1) A person who works in the data library.
- (2) See *CA-Librarian*.

**library**

- (1) A collection of programs or data files.
- (2) A collection of functions (subroutines) that are linked into the main program

BEST AVAILABLE COPY

## field template

### field template

See *picture*.

### FIF

(Fractal Image Format) A graphics file format from Iterated Systems, Inc., Norcross, GA, that stores fractal images with compression ratios as high as 2,500:1.

### FIFO

(First In-First Out) A storage method that retrieves the item stored for the longest time. Contrast with *LIFO*.

### fifth-generation computer

A computer designed for AI applications. Appearing in the late 1990s, these systems will represent the next technology leap.

### file

A collection of bytes stored as an individual entity. All data on disk is stored as a file with an assigned file name that is unique within the directory it resides in. To the computer, a file is nothing more than a series of bytes. The structure of a file is known to the software that manipulates it. For example, database files are made up of a series of records. Word processing files, also called documents, contain a continuous flow of text.

Following are the major types of files stored in a computer system. Except for ASCII text files, all files contain proprietary information contained in a header or interspersed throughout the file.

Type	Contents
data file (table)	data records
document	text
spreadsheet	rows and columns of cells
image	rows and columns of bits
drawing	list of vectors
audio	digitized sound waves
MIDI	MIDI instructions
video	digital video frames
batch file	text
source program	text
object program (EXE & COM file)	machine language

### file and record locking

A first-come, first-served technique for managing data in a multiuser environment. The first user to access the file or record prevents, or locks out, other users from accessing it. After the file or record is updated, it is unlocked and available.

### file association

- (1) The relationship between the file and the application that created it. In the DOS/Windows world, the association is made by the file extension.
- (2) The relationship of one file to another based on the data it contains.

### file attribute

A file access classification that allows a file to be retrieved or erased. Typical attributes are read/write, read only, archive and hidden.

### file find

A utility that searches all directories for matching file names.

BEST AVAILABLE COPY